

CLAIMS

1. A diamond wheel for forming a scribe line on a surface of a brittle material while rolling thereon, wherein diamond grains having 1000 to 8000 mesh are held by a bonding agent.
2. The diamond wheel according to claim 1, wherein a blade having a V-section is formed in an entire circumferential direction of a peripheral edge portion of the diamond wheel, a pitch of the diamond grains at a front end edge of the V-shaped blade in the circumferential direction is set to be 2 to 20 μ m.
3. The diamond wheel according to claim 2, wherein the V-shaped section has an opening angle of 110 to 165 degrees.
4. The diamond wheel according to any one of claims 1 to 3, wherein the diamond wheel rolls on the brittle material while oscillating in a direction crossing the surface of the brittle material.
5. A scribing apparatus for forming a scribe line on a surface of a brittle material, comprising:
 - a diamond wheel in which diamond grains having 1000 to 8000 mesh are held by a bonding agent;
 - a holding member for holding the diamond wheel to be rollable;
 - an oscillation generation member for oscillating the holding member in a direction crossing the surface of the brittle material; and
 - a moving mechanism for moving the holding member along the

surface of the brittle material so that the diamond wheel rolls on the surface of the brittle material.